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Space Systems Academic Group

Space Systems Academic Group Publications

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2012

# Master of Science Space Systems Operations Brochure / 2012

Sands, Tim

Monterey, California. Naval Postgraduate School

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## About This Program >>>

### Who can enroll in this program?

- U.S. military officers
- U.S. government civilians
- Contractors

### What are the entrance requirements?

- A baccalaureate degree
- Completion of mathematics through integral calculus
- One course in calculus-based physics.
- GPA of 2.6 or better

### What is the academic focus?

The MS Space Systems Operations (MSSSO) program provides students with scientific, technical, and operational knowledge of military space systems. Graduates are prepared to manage the technical aspects of a space system life cycle including requirements definition and analysis, design, development, installation, operations and maintenance of spacecraft, space payloads, supporting ground stations, terminals, and C3 connectivity.

### When does the program start?

The MSSSO program starts in the fall quarter and continues for 2 years with two courses per quarter.

### How are courses taught?

Courses are delivered using either online course websites (Sakai) or through a web-conferencing tool (Elluminate). Online courses typically have weekly modules, which the student can complete at any time during the week. Each web-conferencing course will have two 2-hour sessions per week. All course work requires access to a computer with high-speed internet access.

## Contact Information:

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[www.nps.edu/DL/  
Degree\\_Progs/MSSSO.asp](http://www.nps.edu/DL/Degree_Progs/MSSSO.asp)

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MASTER OF  
SCIENCE

# Space Systems Operations

*A non-resident,  
distributed learning, accredited  
graduate degree focused on national  
security space!*



NAVAL POSTGRADUATE SCHOOL

## The Program >>>

The Master of Science in Space Systems Operations (MSSSO) Distributed Learning (DL) degree builds on 25 years experience educating military officers in masters and doctorate programs in space systems engineering and operations at the Naval Postgraduate School in Monterey, CA.

Over 300 officers at duty stations around the world have taken our DL space systems courses offered as part of the NPS space systems certificate program.

The DL MSSSO program brings the core of the on-campus courses together with proven DL technology and faculty expertise to deliver a unique curriculum focused on national security space.

### Improved understanding!

*"...(NPS DL) courses have significantly improved my understanding of space, ability to make better decisions in my job based on that understanding, and communication ability with space experts."*

— NPS DL Student

### Greater flexibility!

*"...This is my first experience with (NPS DL Courses) and I am greatly impressed and thoroughly pleased with the way in which this way of learning allows for greater flexibility around my schedule."*

— NPS DL Student

## The Curriculum >>>

The program consists of a minimum of forty five academic quarter credits taught in two courses per quarter.

### Quarter 1 Fall

- Space Technologies and Applications
- Physics of Space & Airborne Sensor Systems

### Quarter 2 Winter

- Orbital Mechanics/Launch Systems
- Introduction to the Space Environment

### Quarter 3 Spring

- Intro to Communications Systems Engineering
- Spacecraft Systems I

### Quarter 4 Summer

- Spacecraft Systems 2
- Communications Systems Analysis

### Quarter 5 Fall

- Military Satellite Communications
- Space Systems and Operations 1

### Quarter 6 Winter

- Space Systems and Operations 2
- Research

### Quarter 7 Spring

- Military Space Systems and Architectures
- Research

### Quarter 8 Summer

- Research

## The Mission >>>

The mission of NPS is to provide relevant and unique advanced education and research programs that increase the combat effectiveness of United States and Allied armed forces and enhance the security of the United States.

The Space Systems Academic Group supports this mission by educating Navy, Marine, Army, and Air Force space professionals on space technologies, systems, and applications to support the joint application of space in today's and tomorrow's battlefield.

### Relevance to your job!

*"...as a submarine officer, I came to NGA with very little understanding of satellites, orbital mechanics, the physics of remote sensing, or link budgets. The Space Systems...classes have been directly pertinent to my job in the Studies and Analysis shop." — NPS DL Student*

### 33 NPS alumni are astronauts!



Image courtesy of <http://grin.hq.nasa.gov>